

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B31B29/60 B31B19/62 B05C5/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B31B B05C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4 157 149 A (MOEN LENARD E) 5 June 1979 (1979-06-05) column 2, line 31 - column 6, line 42; figures 1-3	1-14, 16, 17
A	-----	15
Y	DE 12 26 869 B (WINDMOELLER & HOELSCHER) 13 October 1966 (1966-10-13) column 3, line 66 - column 4, line 47; figures 5-7	1-14, 16, 17
A	-----	15
A	DE 35 06 393 A (WINDMOELLER & HOELSCHER) 28 August 1986 (1986-08-28) page 10, last paragraph; figures 1, 2, 5 ----- -/--	1-4, 6-8, 14, 16, 17

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the international search

1 December 2004

Date of mailing of the international search report

09/12/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Johne, O

INTERNATIONAL SEARCH REPORT

International Application No
/EP2004/007489

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2002/026897 A1 (STEFFENS JORG ET AL) 7 March 2002 (2002-03-07) page 2, paragraph 25 - paragraph 27 -----	1-6, 9, 11-14, 16, 17
A	US 6 220 843 B1 (ALLEN MARTIN A) 24 April 2001 (2001-04-24) column 7, line 51 - column 8, line 45; figures 1-8 -----	1-6, 12, 13
A	US 2002/079327 A1 (ESTELLE PETER W ET AL) 27 June 2002 (2002-06-27) paragraph '0091! - paragraph '0092!; figures 1, 10 -----	1-6, 9, 12-14

BEST AVAILABLE COPY

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

US/EP2004/007489

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4157149	A	05-06-1979	US 4265377 A	05-05-1981
DE 1226869	B	13-10-1966	NONE	
DE 3506393	A	28-08-1986	DE 3506393 A1	28-08-1986
US 2002026897	A1	07-03-2002	DE 29908150 U1	05-08-1999
			AT 250983 T	15-10-2003
			AU 4404600 A	21-11-2000
			CA 2368115 A1	16-11-2000
			DE 50003910 D1	06-11-2003
			WO 0067914 A2	16-11-2000
			EP 1181105 A2	27-02-2002
			ES 2204574 T3	01-05-2004
			JP 2002543967 T	24-12-2002
US 6220843	B1	24-04-2001	AU 3001699 A	27-09-1999
			CN 1102079 B	26-02-2003
			DE 69917234 D1	17-06-2004
			EP 1407830 A2	14-04-2004
			EP 1062051 A1	27-12-2000
			JP 2002505951 T	26-02-2002
			WO 9946057 A1	16-09-1999
US 2002079327	A1	27-06-2002	US 6401976 B1	11-06-2002
			EP 1147817 A2	24-10-2001
			JP 2001300404 A	30-10-2001
			US 2002100775 A1	01-08-2002
			US 2001023880 A1	27-09-2001
			US 2001023876 A1	27-09-2001

BEST AVAILABLE COPY